a corroboration of the law formulated by Golgi, that in all parts of the central nervous system, the specific function, whatever may be its nature, ought to be effected not by the isolated or individual action of its single ganglionic elements, but by the conjoined action of extensive groups of cells.

It may be well to add the method of preparation which was employed to obtain the fine results in staining shown in the plates. The specimen is best taken from young animals, must be carefully and well-hardened. Before taking out the brain, he makes repeated injections of a two per cent. solution of bichromate of potassium into the carotid artery. This makes the hardening more even. After this he cuts the brain into pieces and leaves them in Müller's fluid for twenty-four hours, after which he makes sections with a razor into smaller pieces of a cubic centimeter. These he puts again into Müller's fluid, leaving them at an ordinary temperature for eight or ten days ; if it is cold it is necessary to leave them for a longer time. He then places them in a solution of about eight parts of Müller's fluid and two parts of a solution of one per cent. of osmic acid. This mixture accelerates the hardening. The fluid should be abundant and clear, and contain only a few pieces. After twenty-four hours they should be placed directly into a solution of sixty per cent. nitrate of silver, which should be changed after about half-an-hour, because of the precipitate which it forms. In this last solution it is necessary that the pieces remain at least twenty-four or forty-eight hours, longer will not cause any alteration. The sections should then be made, after which they are washed in common alcohol, then passed directly into creosote and left until they have acquired an evident transparency. Then wash them a number of times in turpentine, leaving them for twenty minutes, after which mount in Canada balsam without covering.

PHYSIOLOGY OF THE NERVOUS SYSTEM.

TRAUMATIC CORTICAL HEMIEPILEPSY. Dr. E. Houzé (Bulletin de la Société de Médicine Mentale, 1884, p. 48).

Patient, male, æt. 22, entered hospital February 5th,

1886. Three years previously had received a severe blow with an iron plate on the top of the head. Deep wound. No loss of consciousness. After a few days, convulsive movements in the right leg, and on the fifteenth day a convulsive attack of the entire right side with loss of consciousness. Frequent repetition of the attacks, after which walking became difficult. Severe headaches. After several months, convulsive seizures in right hand and arm ; since six months, of face also. At this time signs of amnesic aphasia.

Examination shows occasional contractions in territory of right facial. Speech hesitating, tongue affected with spasmodic movements. Speech scanning; amnesia; lingual ataxia. Agraphia due to convulsive movements of arm. From these symptoms a lesion at the foot of the lower frontal convolution was assumed. The fingers of the right hand are alternately flexed and extended. When the foot is placed upon the ground, rapid movements of the flexion and extension also occur. Walk, dragging, hemiparetic. The convulsive attacks occur ten to fifteen times daily. These are usually confined to the right side, but are sometimes generalized.

In addition to these symptoms of motor irritation, hyperæsthesia of the right foot and hand is observed. Muscular sense is also reduced; no ataxia. Tendon reflexes normal. Cephalometric measurements were employed for the determination of the precise location of the bone cicatrix. These showed the scar to be situated near the central fissure and bordered by the central convolutions.

After a long period of medicinal treatment the patient improved until only convulsive movements in the right leg and occasional epileptic attacks upon that side were pressent. After five months of slow improvement, trepanation was performed. A small spicula of bone was found at the superior extremity of the central convolution (the symptoms of irritation of the arm and face centres are considered secondary, due to indirect pressure), and removed.

When discharged from the hospital he had no attack for two months, and the twitchings in the foot were rare and not severe. G. W. J.